

**We claim:**

1           1. A machine tool comprising:  
2           a machine frame defining a working region and a  
3           workpiece-replacement region and formed with guides defining a  
4           path between said regions;  
5           a tool carrier at said working region for receiving a  
6           tool for machining a workpiece positioned at said working region;  
7           and  
8           two workpiece carriers displaceable along said guides  
9           and formed as cross slides with automatically actuatable  
10          workpiece holders jointly engageable in common with said  
11          workpiece for automatically displacing said workpiece between  
12          said regions.

1           2. The machine tool defined in claim 1 wherein said  
2           tool carrier is constructed and arranged for selectively  
3           receiving a tool for turning, milling, grinding, drilling, boring  
4           and grinding said workpiece.

1           3. The machine tool defined in claim 1 wherein said  
2           guides are rails extending longitudinally of said machine frame  
3           and said regions are spaced longitudinally apart on said machine

4 frame, said cross slides each having a longitudinal slide  
5 displaceable on said rails jointly with the other longitudinal  
6 slide in a first direction of movement corresponding to z-axis  
7 feed motion for machining of the workpiece in said working region  
8 and displacement of said workpiece between said regions for  
9 depositing a machined workpiece in said workpiece-replacement  
10 region and receiving a workpiece to be machined in said  
11 workpiece-replacement region.

1 4. The machine tool defined in claim 3 wherein each of  
2 said cross slides comprises a transverse slide on the respective  
3 longitudinal slide for displacing a workpiece jointly held by the  
4 workpiece holders of said cross slides in a second direction of  
5 an x-axis perpendicular to said first direction by simultaneous  
6 movement of both said transverse slides.

1 5. The machine tool defined in claim 4 wherein said  
2 machine frame has two spaced apart parallel side walls between  
3 which the working region and the workpiece-replacement region are  
4 located, said rails being provided on said side walls.

1           6. The machine tool defined in claim 4 wherein said  
2     workpiece holders are respective chucks adapted to receive and  
3     automatically clamp the respective workpiece.

1           7. The machine tool defined in claim 6 wherein at  
2     least one of said chucks is provided with a rotating drive for  
3     rotating the respective workpiece on the cross slides.

1           8. The machine tool defined in claim 7 wherein said  
2     tool carrier includes a revolving head for a plurality of  
3     machining tools.

1           9. The machine tool defined in claim 7 wherein said  
2     tool carrier includes at least one motor-driven spindle for at  
3     least one tool for machining the respective workpiece.

1           10. The machine tool defined in claim 9 wherein said  
2     spindle is displaceable on said machine frame in a direction  
3     perpendicular to a direction of displacement of a workpiece by  
4     said cross slides.

1           11.    The machine tool defined in claim 9 wherein said  
2 spindle is displaceable in a direction perpendicular to a  
3 rotation axis of said spindle.

1           12.    The machine tool defined in claim 9, further  
2 comprising a workpiece changer at said workpiece-replacement  
3 region for exchanging a machined workpiece held by said cross  
4 slides for a workpiece requiring machining.

5           13.    The machine tool defined in claim 4 wherein each  
6 of said longitudinal slides has an intermediate part and lateral  
7 parts flanking the intermediate part and riding on said rails,  
8 the lateral parts being of different lengths.

1           14.    The machine tool defined in claim 13 wherein said  
2 longitudinal slides are of identical configuration and are offset  
3 in a plan view through 180° with respect to one another.

1           15.    The machine tool defined in claim 13, further  
2 comprising vertical rails on each longitudinal slide for vertical  
3 displacement of the respective transverse slide.